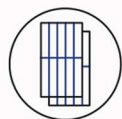


(182mm mono PERC half-cell, high-efficiency bifacial module )

# 440-460W 0-5W Positive Tolerance



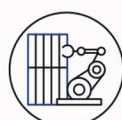
### MBB&SMBB Half-cut Cell Technology

New circuit design, lower internal current, and lower Rs loss.



### High Power Density

A new generation of monocrystalline products with reduced resistive losses for greater power output.



### Mechanical Properties

An aluminum frame in special design for better mechanical properties and more efficient installation.



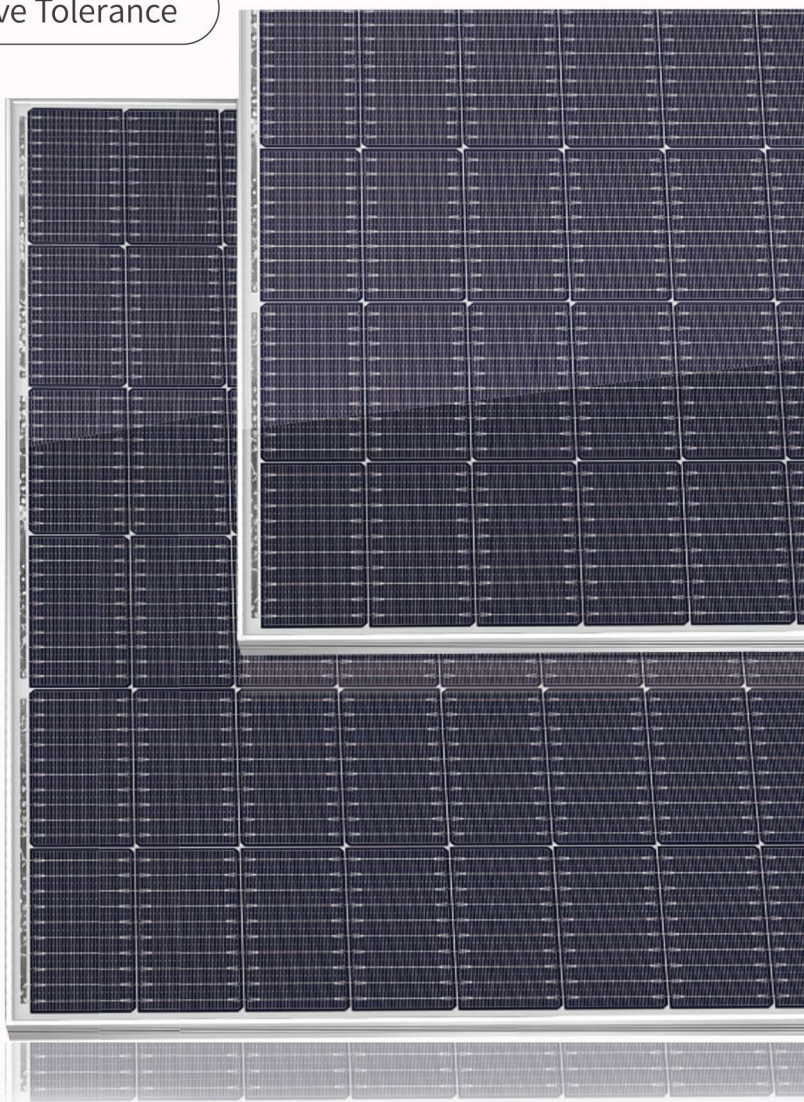
### Excellent Weather Resistance

The solar modules can meet the IEC standard requirements with strong resistant to risks such as salt spray, ammonia gas, dust, snail marks and electric potential induced attenuation.

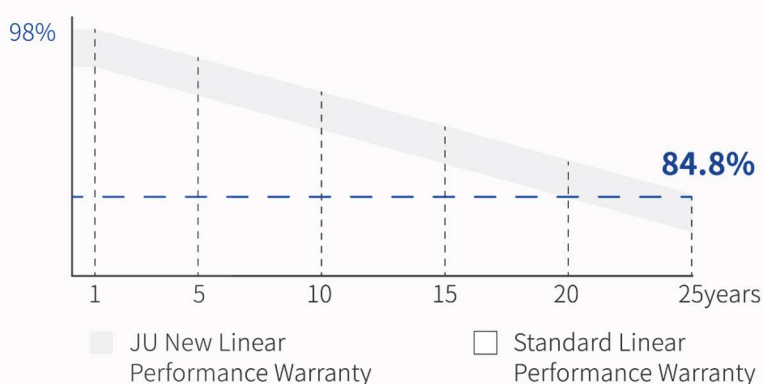


### 4 Times 100% EL Detection

Guarantee no micro cracks



## PRODUCT QUALITY SYSTEM & CERTIFICATION



- 12years Material & process Warranty
- 25years Linear Performance Warranty
- 0.55% Linear Power Degradation

## ELECTRICAL PROPERTIES

**SM-182M-60HBG 120PCS**

STC : irradiance, 1000W/m<sup>2</sup>; cell temperature, 25°C; spectral range, AM1.5

NOCT: irradiance, 800 W/m<sup>2</sup>; ambient temperature, 20 °C; spectral range, AM1.5; wind speed, 1m/s

	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum power - P <sub>mp</sub> (W)	440	328	445	322	450	336	455	339	460	343
Open-circuit voltage - V <sub>oc</sub> (V)	40.99	38.60	41.16	38.70	41.33	38.90	41.50	39.10	41.70	39.20
Short-circuit current - I <sub>sc</sub> (A)	13.69	11.04	13.78	11.11	13.86	11.17	13.94	11.24	14.02	11.30
Maximum operating voltage - V <sub>mp</sub> (V)	34.35	32.10	34.53	32.20	34.70	32.40	34.87	32.60	35.04	32.70
Maximum operating current - I <sub>mp</sub> (A)	12.81	10.23	12.89	10.30	12.97	10.36	13.05	10.42	13.13	10.49
Module conversion efficiency - η <sub>m</sub>	20.30%		20.50%		20.70%		21.00%		21.20%	

## ELECTRICAL PROPERTIES VERSUS POWER GAINS FROM THE REAR (TAKING A IRRADIANCE OF 10%)

Maximum power - P <sub>mp</sub> (W)	470	475	480	485	490
Open-circuit voltage - V <sub>oc</sub> (V)	40.99	41.16	41.33	41.50	41.70
Short-circuit current - I <sub>sc</sub> (A)	14.65	14.74	14.83	14.91	15.00
Maximum operating voltage - V <sub>mp</sub> (V)	34.35	34.53	34.70	34.87	35.04
Maximum operating current - I <sub>mp</sub> (A)	13.71	13.79	13.88	13.96	14.05
Irradiance ratio (Rear / Front)	10%				
Bifaciality	70±5%				

## ABSOLUTE RATING

Power tolerance (W)	(0, +5)
Mechanical load	Front5400Pa/Back2400Pa
Maximum system voltage (V)	1500
Maximum series fuse rating (A)	25
Operating temperature	-40~+85°C

## MECHANICAL PROPERTIES

Module dimensions(L*W*H)	1914 x 1134 x 30mm
Weight	26.8kg
Cell quantity	120PCS
Cell model	PERC Monocrystalline182 x 91mm
Glass	2.0mm AR, High Transmission, semi-tempered glass
Frame	Anodized aluminium alloy
Junction box	IP68 Rated
Output line	4.0mm <sup>2</sup> , wire length 300mm
Connector	MC4 Compatible

## TEMPERATURE CHARACTERISTIC

Temperature coefficient (P <sub>max</sub> )	-0.35% / °C
Temperature coefficient (V <sub>oc</sub> )	-0.27% / °C
Temperature coefficient (I <sub>sc</sub> )	+0.048% / °C
NMOT	43±2°C

## PACKAGING

Container	40HQ
PCS / Pallet	36
PCS / Container	864

## PRODUCT ASSEMBLY DRAWING(mm)

